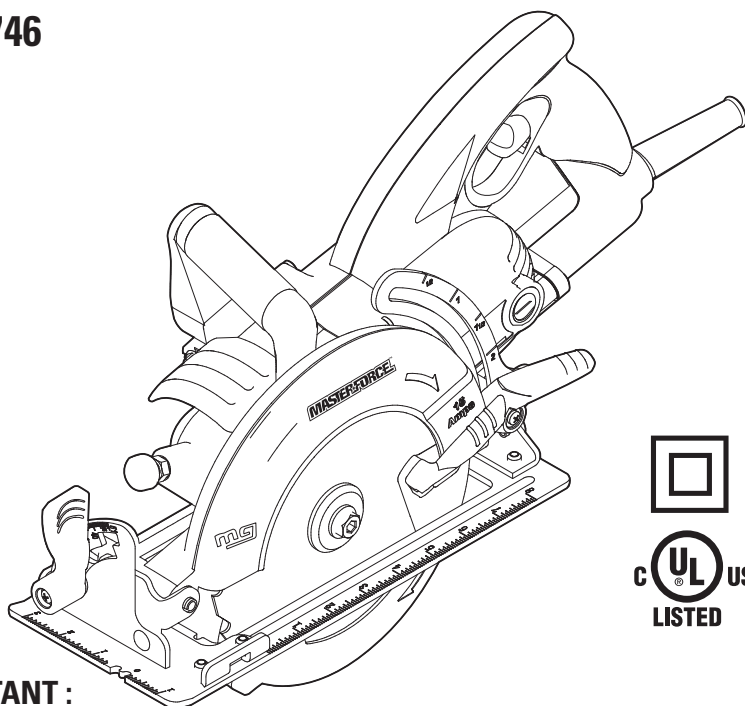


# MASTERFORCE™

## OPERATING MANUAL

### 7-1/4-in. 15 Amp Hypoid Circular Saw

241-0746



#### IMPORTANT :

⚠ Carefully read this Owner's Manual before using this tool. Pay close attention to all **Safety Instructions, Warnings, and Caution sections**. Use this tool properly, and only for its intended use.

⚠ Safety symbols in this manual are used to flag possible dangers. The safety symbols and their explanations require the operator's full understanding. The safety warnings do not, by themselves, eliminate any danger, and they are not a substitute for proper accident prevention measures.

⚠ This Safety Alert Symbol indicates caution, warning, or danger. Failure to obey a safety warning can result in serious injury to yourself or others. To reduce the risk of injury, fire, or electric shock, always follow the safety precautions.

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PRODUCT SPECIFICATIONS	
Input	15 Amps
Rating	120V, 60Hz AC
No-load Speed	4400RPM
Blade Diameter	7-1/4 in. (184mm)
Cutting Depth at 90°	2-3/8 in. (59.5mm)
Cutting Depth at 45°	1-11/16 in. (42.5mm)
Maximum Bevel Angle	51°

# SAFETY SYMBOLS FOR YOUR TOOL

The label on your tool may include the following symbols.

- V .....Volts
- A.....Amps
- Hz.....Hertz
- W.....Watts
- min.....Minutes
- ~ .....Alternating current
- == .....Direct current
- n<sub>o</sub> .....No-load speed
- ☐ .....Class II construction, Double Insulated
- .../min.....Revolutions or Strokes per minute
-  ..... Indicates danger, warning or caution. It means attention! Your safety is involved.

# RULES FOR SAFE OPERATION

## KNOW THE TOOL

To operate this tool, carefully read this Owner's Manual and all labels affixed to the saw before using. Keep this Manual available for future reference.

## IMPORTANT

This tool should only be serviced by a qualified service technician. For more information, call the toll-free helpline, at 1-866-917-4374.

## READ ALL INSTRUCTIONS THOROUGHLY

### GENERAL SAFETY RULES FOR ALL POWER TOOLS

**⚠ WARNING! Read and understand all instructions.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

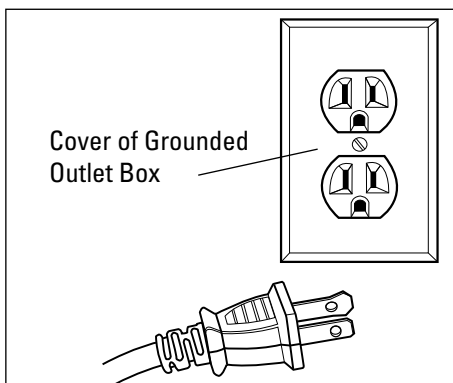
### SAVE THESE INSTRUCTIONS.

#### WORK AREA

- **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

#### ELECTRICAL SAFETY

- **Double insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation ☐ eliminates the need for the three wire grounded power cord and grounded power supply system.



- **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.
- **Don't expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.
- **When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W".** These cords are rated for outdoor use and reduce the risk of electric shock. The following table shows the correct size to use, depending on cord length and nameplate amperage rating of the tool. When in doubt, use the next heavier gauge. Always use UL and CSA listed extension cords.

#### Recommended sizes of extension cords

Tool's Ampere rating	Volts	Total length of cord in feet Cord size in A.W.G.(minimum)			
		25'	50'	100'	150'
0-6	120V~	18	16	16	14
6-10		18	16	14	12
10-12		16	16	14	12
12-16		14	12	Not Recommended	

#### PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
- **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
- **Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** Proper footing

and balance enables better control of the tool in unexpected situations.

- **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.
- **Before connecting the tool to a power source (receptacle, outlet, etc.), be sure voltage supplied is the same as that specified on the nameplate of the tool.** A power source with voltage greater than that specified for the tool can result in serious injury to the user – as well as damage to the tool.

## TOOL USE AND CARE


- **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
- **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which is designed.
- **Do not use tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
- **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
- **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool, may become hazardous when used on another tool.
- **Do not alter or misuse tool.** These tools are precision built. Any alteration or modification not specified is misuse and may result in a dangerous condition.

## SERVICE

- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
- **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of

unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

## SPECIFIC SAFETY RULES FOR CIRCULAR SAWS

 **DANGER:** Keep hands away from cutting area and blade. Keep your second hand on auxiliary handle, or motor housing. If both hands are holding the saw, they cannot be cut by the blade.

- **Keep your body positioned to either side of the saw blade, but not in line with the saw blade.** KICKBACK could cause the saw to jump backwards.
- **Do not reach underneath the work.** The guard can not protect you from the blade below the work.
- **Check lower guard for proper closing before each use. Do not operate saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.** If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the Retracting Handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- **Check the operation and condition of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use.** Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a buildup of debris.
- **Lower guard should be retracted manually only for special cuts such as “Pocket Cuts” and “Compound Cuts”. Raise lower guard by Retracting Handle. As soon as blade enters the material, lower guard must be released.** For all other sawing, the lower guard should operate automatically.
- **Always observe that the lower guard is covering the blade before placing saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk backward, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.
- **NEVER hold piece being cut in your hands or across your leg.** It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- **Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a “live” wire will also make exposed metal parts of the tool “live” and shock the operator.
- **When ripping always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance for blade binding.
- **Always use blades with correct size and shape (diamond vs. round) arbor**

**holes.** Blades that do not match the mounting hardware of the saw will run eccentrically causing loss of control.

- **Never use damaged or incorrect blade washers or bolts.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.
- **Causes and operator prevention of kickback:**
  - Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator.
  - When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator.
  - If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward operator.
  - Kickback is the result of tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:
- **Maintain a firm grip with both hands on the saw and position your body and arm to allow you to resist KICKBACK forces.** KICKBACK forces can be controlled by the operator, if proper precautions are taken.
- **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or KICKBACK may occur.** Investigate and take corrective actions to eliminate the cause of blade binding.
- **When restarting a saw in the workpiece, center the saw blade in the kerf and check that saw teeth are not engaged into the material.** If saw blade is binding, it may walk up or KICKBACK from the workpiece as the saw is restarted.
- **Support large panels to minimize the risk of blade pinching and KICKBACK.** Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides near the line of cut and near the edge of the panel.
- **Do not use dull or damaged blade.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and KICKBACK.
- **Blade depth and bevel adjusting locking levers must be tight and secure before making cut.** If blade adjustment shifts while cutting, it may cause binding and KICKBACK.
- **Use extra caution when making a “Pocket Cut” into existing walls or other blind areas.** The protruding blade may cut objects that can cause KICKBACK.

- Do not use the circular saw near fumes or combustible liquids.
- Never slow the blade down with your hands, or by applying pressure to the side of the blade.
- Never apply force! Move the circular saw forward gently and steadily.

## UNPACKING

**⚠ WARNING:** If any parts are broken or missing, DO NOT attempt to plug in the power cord or operate the saw until the broken or missing parts are replaced. Failure to do so could result in possibly serious injury.

**⚠ WARNING:** Do not attempt to modify this saw or create accessories not recommended for use with this saw. Any such alteration or modification is misuse and could result in a hazardous condition leading to possibly serious injury.

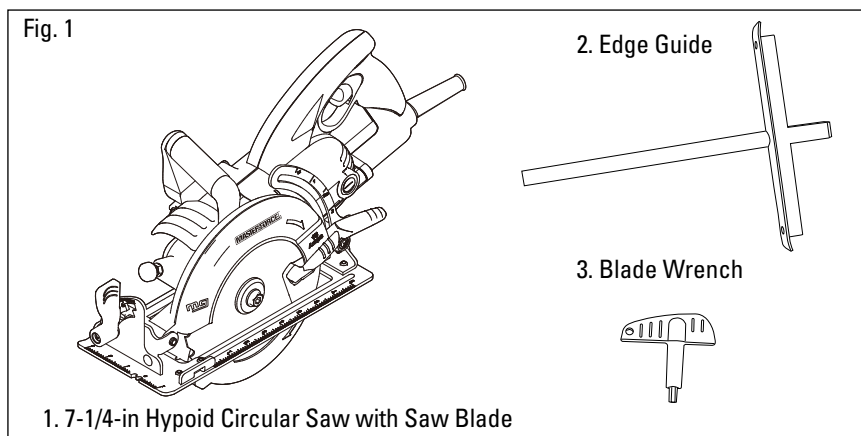
**⚠ WARNING:** To prevent accidental starting that could cause serious personal injury, always disconnect the tool from the power source when assembling parts.

## UNPACKING

This product has been shipped completely assembled.

1. Carefully remove the tool and the accessories from the box. Make sure that all items listed in the packing list are included.
2. Inspect the tool carefully to make sure that no breakage or damage occurred during shipping.
3. Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.
4. If any parts are damaged or missing, return the product for replacement.

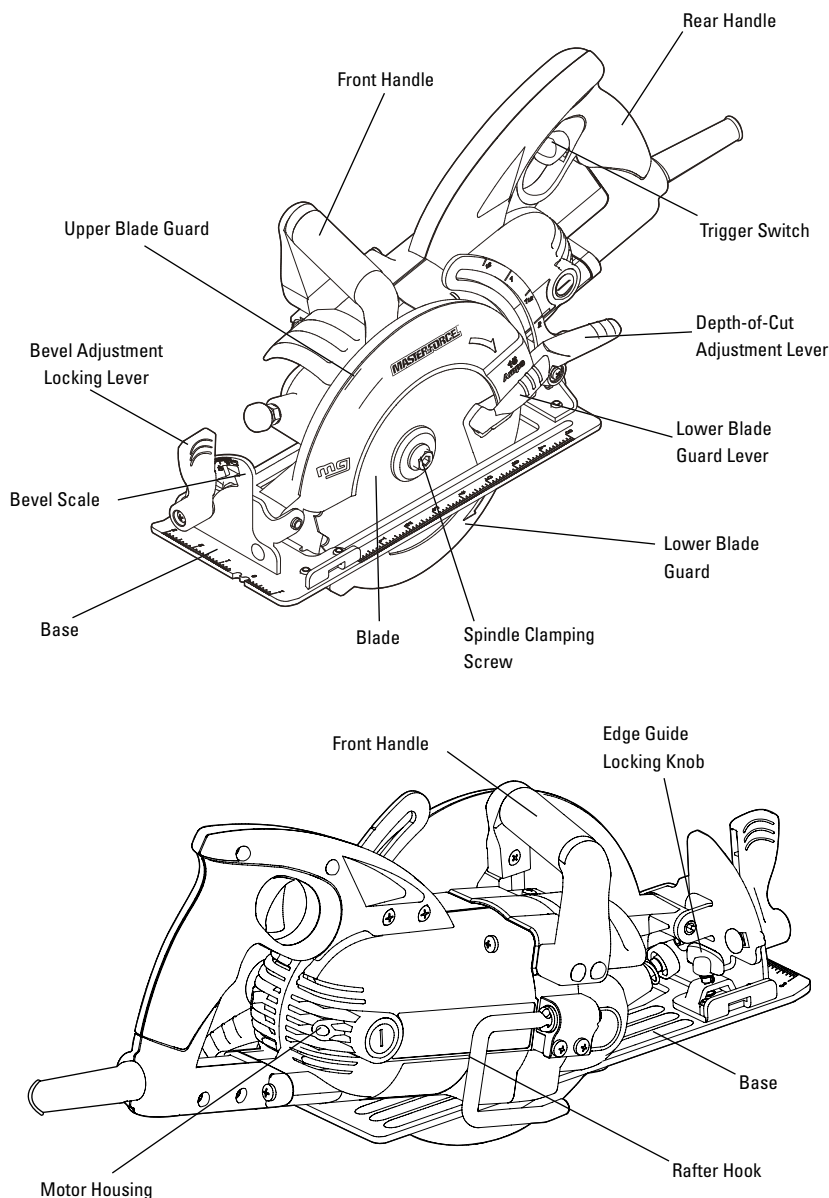
## PARTS LIST (Fig. 1)



# DESCRIPTION

## KNOW YOUR HYPOID CIRCULAR SAW (Fig. 2)

Fig. 2



**NOTE:** Before attempting to use your saw, familiarize yourself with all of the operating features and safety requirements.

Your hypoid circular saw has a precision-built electric motor and it should only be connected to a 120-volt, 60-Hz AC ONLY power supply (normal household current). DO NOT operate on direct current (DC). This large voltage drop will cause a loss of power and the motor will overheat. If the saw does not operate when plugged into correct 120-volt, 60-Hz AC ONLY outlet, check the power supply. The saw has a 8-ft, 2-wire power cord (no adapter needed).

**This Hypoid Circular Saw has the following features:**

- 15 Amp, 4400 RPM (no-load speed) motor provides power and torque for fast, sure cuts in wood, plywood, hardboard, and wood-base materials.
- Quick depth-of-cut adjustments with maximum depth of cut: 2-3/8-in. thick at 90°; 1-11/16-in. thick at 45°
- Easy-to-read bevel-cut scale adjusts from 0° to 51° bevel capacity.
- Heavy duty, lightweight, magnesium upper and lower blade guards for extra strength and durability.
- Extended-length trigger switch for maximum control and comfort.
- Aluminum base provides stability for maximum control during sawing applications.
- Rear handle and front assist handle for positive gripping, control, balance, and comfort.
- Includes 24-tooth, carbide-tipped steel, blade for fast, smooth cuts.
- Front-mounted spindle lock for easy blade changes.
- Built-in sawdust ejection chute helps direct dust and chips away from the operator.
- Permanently lubricated ball bearings throughout for smooth operation and long motor life.
- Durable, machined hypoid gearing for efficient power transmission.

## OPERATION

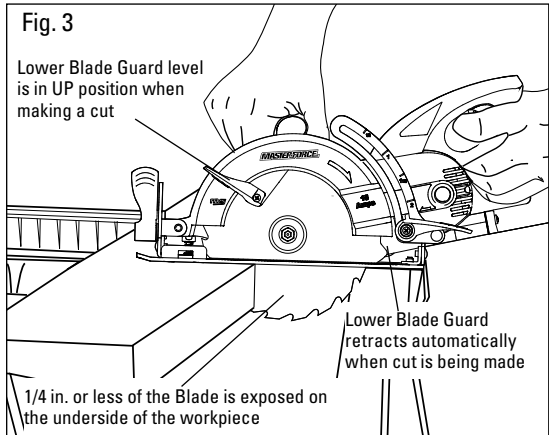
**⚠ WARNING:** The maximum blade capacity of your saw is 7-1/4 inches. Any blade larger than 7-1/4 inch will come in contact with the blade guards. Never use a blade that is so thick that it prevents the outer blade washer from engaging with the flat side of the spindle. Blades that are too large or too thick can result in an accident causing serious injury.

### SAW BLADES

All saw blades need to be kept clean, sharp, and properly set in order to cut efficiently. Using a dull blade places a heavy load on the saw and increases the danger of kickback. Keep extra blades on hand, so sharp blades are always available. Gum and wood pitch that have hardened on the blade will slow the saw. Use gum and pitch remover, hot water, or kerosene to remove these substances. **Do not** use gasoline.

### BLADE GUARD SYSTEM (Fig. 3)

The lower blade guard is there for your protection and safety. It should never be altered for any reason. If the lower blade guard becomes damaged or begins to return slowly or sluggishly, do not operate your saw until the damaged part has been repaired or replaced. Always leave the guard in its correct operating position when using the saw.



**⚠ DANGER:** When sawing through a workpiece, the lower blade guard does not cover the blade on the underside of the workpiece. Keep hands and fingers away from the cutting area. If any part of your body comes in contact with the moving blade, serious injury will result.

**⚠ CAUTION:** Never use the saw when the lower blade guard is not operating properly. The lower blade guard should be checked for correct operation before each use. If you drop your saw, check the lower blade guard and bumper for damage at all depth settings before using.

**NOTE:** The lower blade guard is operating properly when it moves freely and then readily returns to the closed position. If, for any reason, your lower blade guard and bumper do not close freely, take the saw to your nearest Repair Center for service before using it.

## KICKBACK...WHAT CAUSES IT AND WAYS TO HELP PREVENT IT

### Kickback Causes

- Kickback is a sudden reaction to a pinched, bound, or misaligned saw blade, which can cause the saw to lift up and out of the workpiece and toward the operator.
- When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back towards the operator.
- If the blade becomes twisted or misaligned in the cut, the teeth at the rear edge of the blade can dig into the top surface of the wood. This causes the blade to climb out of the kerf and jump back towards the operator.

Fig. 4

Right

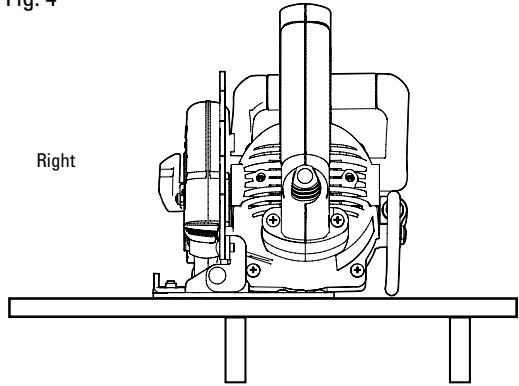
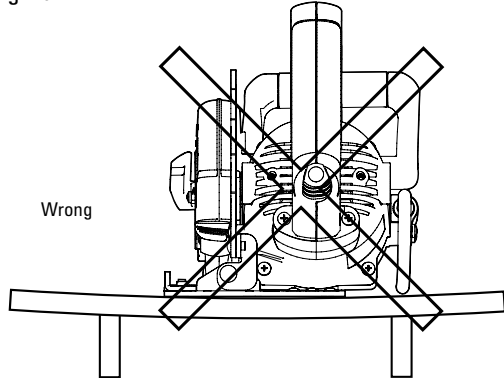


Fig. 4a

Wrong

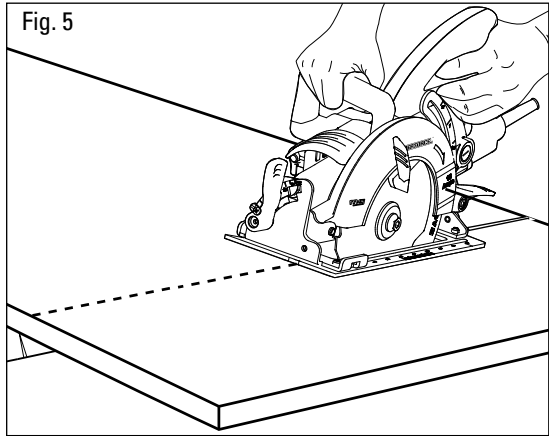


- Sawing into knots or nails in the workpiece can cause kickback.
- Sawing into wet or warped lumber can cause kickback (Fig. 4a).
- Forcing a cut, or not supporting the workpiece correctly can cause kickback (Fig. 4a).
- Tool misuse and/or incorrect operating procedures or conditions can cause kickback.

## Ways to Help Prevent Kickback

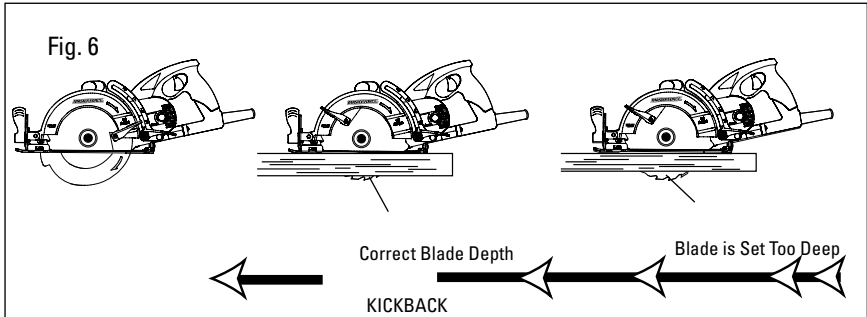
**⚠ DANGER:** Always release the trigger switch immediately if the blade binds or the saw stalls. Kickback could cause you to lose control of the saw. Loss of control can lead to serious injury.

1. **Always** maintain a firm grip with both hands on the saw (Fig. 5) and position your body and arms to allow you to resist kickback forces. The operator can control kickback forces if the proper precautions are taken.



2. If the blade is binding or when you are interrupting a cut for any reason, **always** release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. **Never** attempt to remove the saw from the workpiece or pull the saw backward while the blade is in motion, or kickback may occur. Check and take corrective action to eliminate the cause of blade binding.
3. **Inspect** the workpiece for knots or nails before cutting. Never saw into a knot or nail.
4. **Do not** cut warped or wet lumber (Fig. 4a).
5. **Always** support large panels to minimize the risk of blade pinching and kickback. Large panels tend to sag under their own weight (Fig. 4a). Supports must be placed under the panel: one near the line of cut and one near the edge of the panel (Fig. 4).
6. **When restarting** the saw in the workpiece, center the blade in the kerf and check to be sure that the saw teeth are not engaged into the material. If the saw blade is binding, it may walk up or kick back from the workpiece when the saw is restarted.
7. **Do not** use a dull or damaged blade. Unsharpened, improperly set, or gummed-up blades produce narrow kerfs, which cause excessive friction, blade binding, and Kickback.

8. **Keep the blade at the correct depth setting.** The depth setting should not exceed 1/4 inch below the material being cut (Fig. 6). **Be sure** that the blade depth and adjusting locking levers are tight and secure before making a cut. If blade adjustment shifts while cutting, it may cause binding and Kickback.



9. **Use extra caution** when making a “Pocket Cut” into existing walls or other blind areas. The protruding blade may cut objects that can cause Kickback.

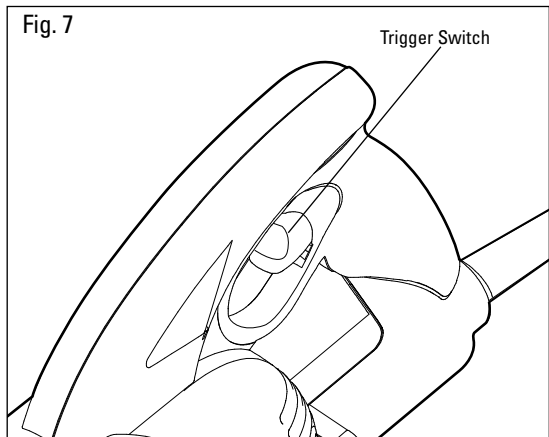
## STARTING/STOPPING THE SAW

To start the saw: Depress the trigger switch (Fig. 7).

Always allow the blade to reach full speed, and then guide the saw into the workpiece.

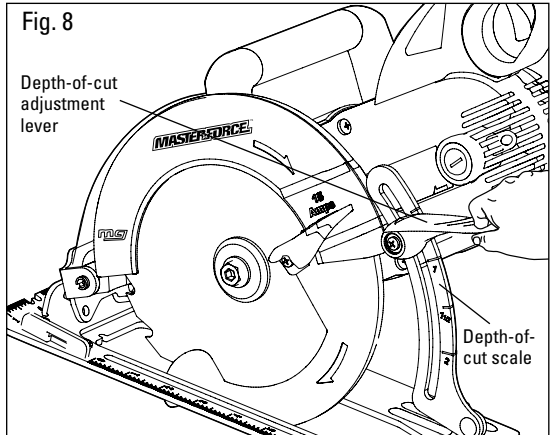
To stop the saw: Release the trigger switch.

After you release the trigger switch, allow the blade to come to a complete stop. Do not remove the saw from the workpiece while the blade is moving.



## MAKING DEPTH-OF-CUT ADJUSTMENTS

Always use the correct blade-depth setting. The correct blade-depth setting for all cuts should not be more than 1/4-inch deeper than the material being cut. Increased cutting depth will increase the chance of kickback and cause the cut to be rough. Your saw is equipped with a depth-of-cut scale that provides increased depth-of-cut accuracy. The depth-of-cut scale is located on the left side of the bracket (Fig 8).



### TO SET THE BLADE DEPTH

**⚠ WARNING:** Always unplug the saw before making any adjustments. Failure to unplug the saw could result in accidental starting, which can cause serious personal injury.

1. Unplug the saw.
2. Raise the depth-of-cut adjustment lever to loosen the base (Fig. 8).
3. Determine the desired depth of cut (see page 19).
4. Locate the depth-of-cut scale on the left side of the bracket (Fig. 8).
5. Hold the base of the saw flat against the edge of the workpiece, and then raise or lower the saw until the indicator aligns with the desired depth-of-cut mark.
6. Tighten the depth-of-cut adjustment lever.

### STARTING A CUT

**⚠ WARNING:** Always securely clamp and support the workpiece. Always maintain proper control of the saw. Failure to clamp and support the workpiece and loss of control of the saw could result in serious injury.

**⚠ WARNING:** Always maintain proper control of the saw to make sawing safer and easier. Loss of control of the saw could cause an accident resulting in possibly serious injury

1. Always use your saw with your hands positioned correctly: with one hand operating the trigger switch and the other on the front assist handle (Fig. 9). Never use the saw with your hands positioned as shown in Fig. 10.

To Help Maintain Control:

**Always** support the workpiece near the cut.

**Always** support the workpiece so the cut will be on your right.

**Always** clamp the workpiece so it will not move during the cut. Place the workpiece with the good side down.

**NOTE:** The good side of the workpiece is the side where appearance is important.

2. Before starting a cut, draw a guideline along the desired line of cut, then place the front edge of the saw base on that part of the workpiece that is solidly supported (Fig. 9).

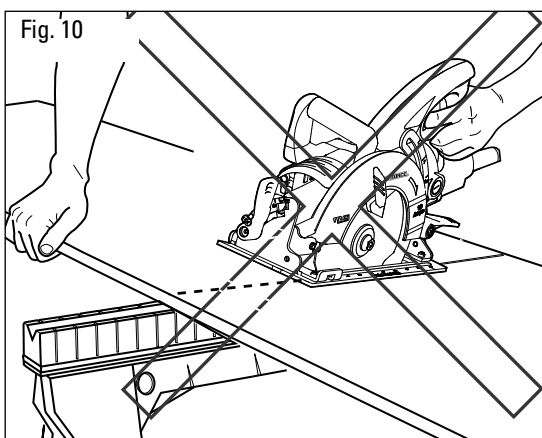
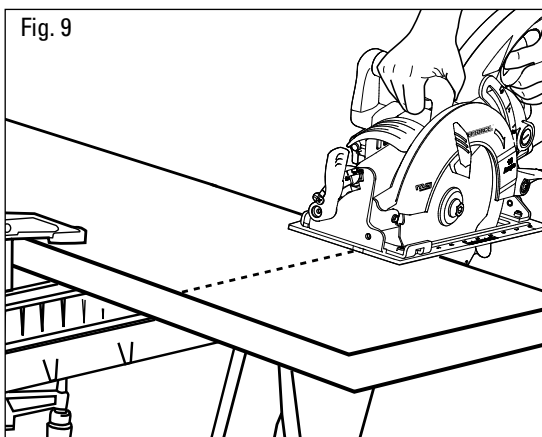
**Never** place the saw on the part of the workpiece that will fall off when the cut is made.

**Always** keep the cord away from the cutting area. **Always** place the cord so that it does not hang up on the workpiece when making a cut.

3. **Hold the saw firmly** with both hands (Fig. 9).

**⚠ WARNING:** If the cord hangs up on the workpiece during a cut, release the trigger switch immediately. To avoid injury, unplug the saw and move the cord to prevent it from hanging up again.

**⚠ DANGER!** Using the saw with a damaged cord could result in serious injury or death. If the cord has been damaged, have it replaced before using the saw again.



4. Depress the trigger switch to start the saw.
5. Always let the blade reach full speed before you begin the cut into the workpiece.
6. When making a cut, always use steady, even pressure. Forcing the saw causes rough cuts and could shorten the life of the saw or cause Kickback.
7. After completing your cut, release the trigger switch and allow the blade to come to a complete stop. **Do not** remove the saw from the workpiece while the blade is moving.

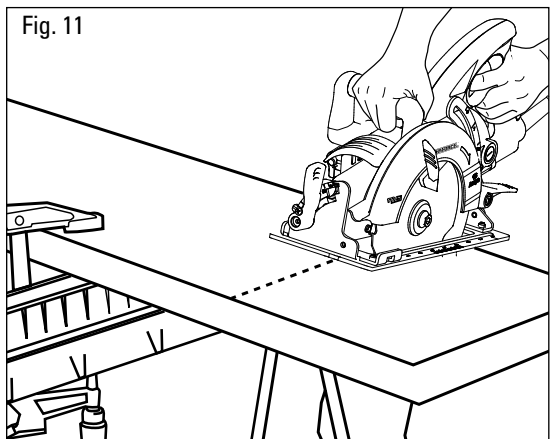
**⚠ DANGER!** When sawing through a workpiece, the lower blade guard does not cover the blade on the underside of the workpiece (Fig. 3). Always keep your hands and fingers away from the cutting area. Any part of your body coming in contact with the moving blade will result in serious injury.

## MAKING CROSS CUTS AND RIP CUTS

**⚠ WARNING:** Always securely clamp and support the workpiece. Always maintain proper control of the saw. Failure to clamp and support the workpiece and loss of control of the saw could result in serious injury.

**⚠ WARNING:** Always maintain proper control of the saw to make sawing safer and easier. Loss of control of the saw could cause an accident resulting in possibly serious injury.

1. Always use your saw with your hands positioned correctly (Fig. 11).
2. When making cross or rip cuts, align your line of cut with the left side of the notch by the 0° indicator. (Fig. 11a).
3. Since the thicknesses of blades vary, **make a trial cut** in scrap material along the guideline to



determine how much, if any, you should offset the blade from the guideline to allow for the kerf of the blade and make an accurate cut.

## INTEGRATED CROSSCUT RULER

A ruler for measuring cross cuts is marked along the front of the saw base.

## MAKING RIP CUTS

**Always** use a guide when making long or wide rip cuts with your saw. You can use either a straight edge or use the edge guide that was included with your saw.

### USING A STRAIGHT EDGE

**⚠ WARNING:** Always securely clamp and support the workpiece. Always maintain proper control of the saw. Failure to clamp and support the workpiece, combined with loss of control of the saw, could result in serious injury.

You can make an efficient rip guide by clamping a straight edge to your workpiece.

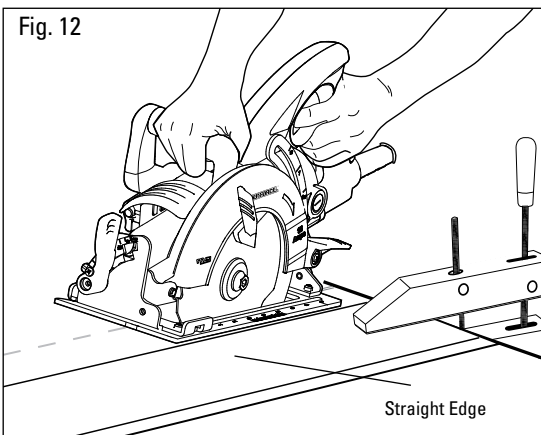
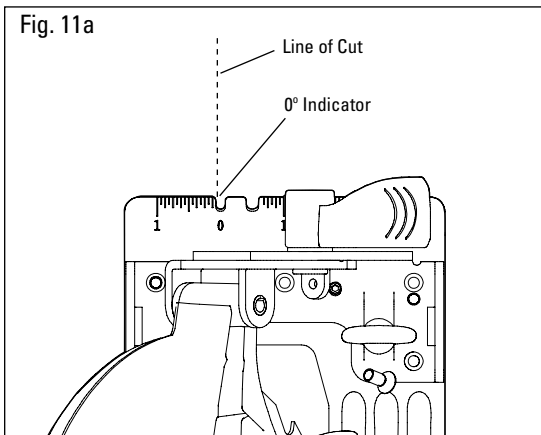
1. Always allow the blade to reach full speed, and then carefully guide the saw into the workpiece. Do not bind the blade in the cut.
2. Carefully guide the saw along the straight edge for a straight rip cut (Fig. 12).
3. Push the saw forward slowly enough that the blade is not laboring.

### EDGE GUIDE

The saw comes with an edge guide. It allows you to make accurate parallel cuts. The edge guide attaches to the saw base and is secured in place with a turn screw.

### USING THE EDGE GUIDE

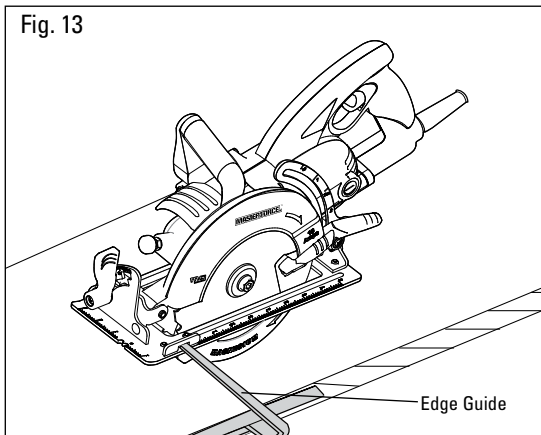
Always use a guide when making long or wide rip cuts with your saw. You can use either a straight edge or use the edge guide that was included with the saw.



**⚠ WARNING:** Always unplug the saw before making any adjustments. Failure to unplug the saw could result in accidental starting, which can cause serious personal injury.

1. Unplug the saw from the power source.
2. Position the edge guide so that the ruler side of the arm is facing up. Slide the arm of the edge guide through the mounting slots at the front of the saw base (Fig 13).
3. Adjust the edge guide to the desired width of cut.

Fig. 13



4. Tighten the edge-guide lock knob.

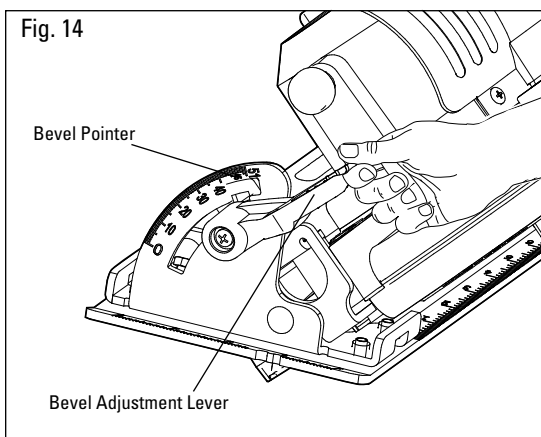
When using the edge guide, position the face of the edge guide firmly against the edge of the workpiece. This will help to make a true cut without binding the blade. The edge of the workpiece must be straight for the cut to be straight. Use caution to prevent the blade from binding in the cut.

## SETTING THE BEVEL ANGLE

**⚠ WARNING:** Always unplug the saw before making any adjustments. Failure to unplug the saw could result in accidental starting, which can cause serious personal injury.

1. Unplug the saw.
2. Loosen bevel adjustment lever (Fig.14).
3. Raise the motor-housing end of the saw until the desired angle setting is indicated on the bevel scale.
4. Tighten the bevel adjustment lever securely.

Fig. 14

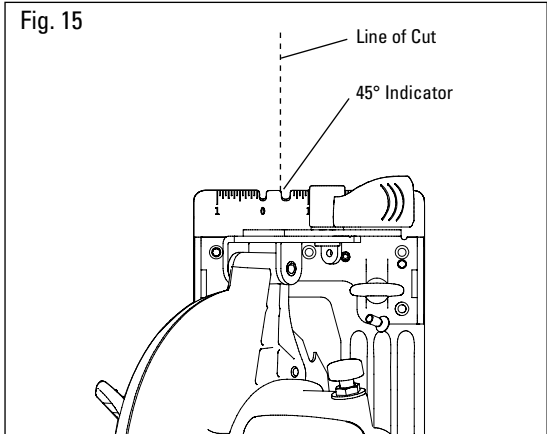


## MAKING BEVEL CUTS

**⚠ WARNING:** Always securely clamp and support the workpiece. Always maintain proper control of the saw. Failure to clamp and support the workpiece and loss of control of saw could result in serious injury.

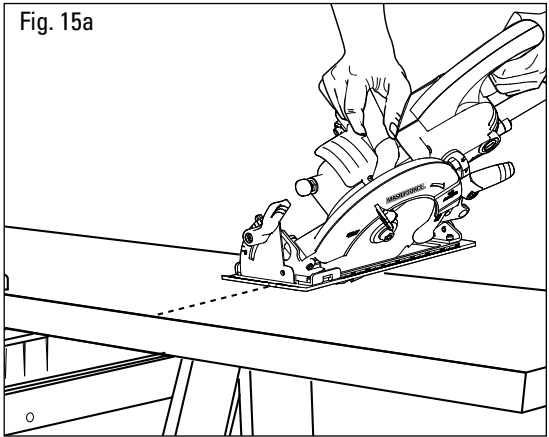
1. Your saw can be adjusted to bevel cut at any angle between  $0^{\circ}$  and  $51^{\circ}$ . When making  $45^{\circ}$  bevel cuts, there is a notch in the saw base to help you line up the blade with the line of cut (Fig. 15).
2. Align your line of cut with the left side of the notch by the  $45^{\circ}$  indicator when making  $45^{\circ}$  bevel cuts.
3. Since blade thicknesses vary and different angles require different settings, **make a trial cut** in scrap material along the guideline to determine how much, if any, you should offset the blade from the guideline to allow for the kerf of the blade.

Fig. 15



4. When making a bevel cut, hold the saw firmly with both hands (Fig. 15a).
5. Rest the front edge of the saw's base on the workpiece, and then depress the trigger switch to start the saw. Always allow the blade to reach full speed, then guide the saw into the workpiece.
6. After completing your cut, release the trigger switch and allow the blade to come to a complete stop in the cut. Do not remove the saw from the workpiece while the blade is moving. It will damage your bevel cut and cause kickback.

Fig. 15a



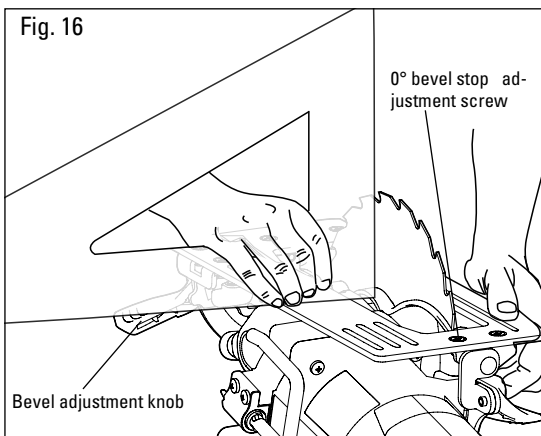
## 0° BEVEL STOP

The saw has a 0° bevel stop that has been factory adjusted to assure a 0° angle of the saw blade when making 90° cuts.

### TO CHECK 0° BEVEL STOP

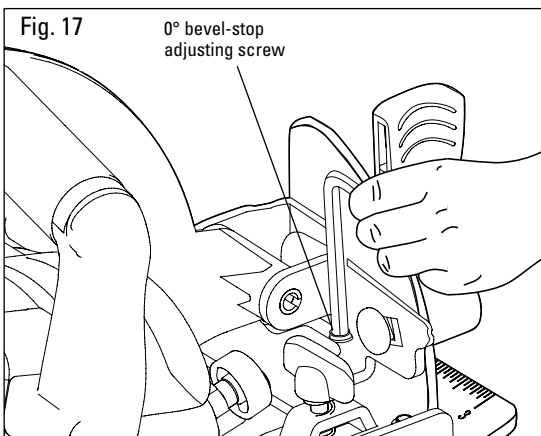
**⚠ WARNING:** Always unplug the saw before making any adjustments. Failure to unplug the saw could result in accidental starting, which can cause serious personal injury.

1. Unplug the saw from the power source.
2. Place the saw in an upside-down position on a workbench.
3. Using a carpenter's square, check that the saw blade is square to the base of the saw (Fig 16).



### TO ADJUST 0° BEVEL STOP (Fig. 17)

1. Unplug the saw from the power source.
2. Loosen the bevel-adjustment knob.
3. Locate the 0° bevel-stop adjusting screw
4. Using a hex key, turn the 0° bevel-stop adjusting screw until it is square with the saw blade.

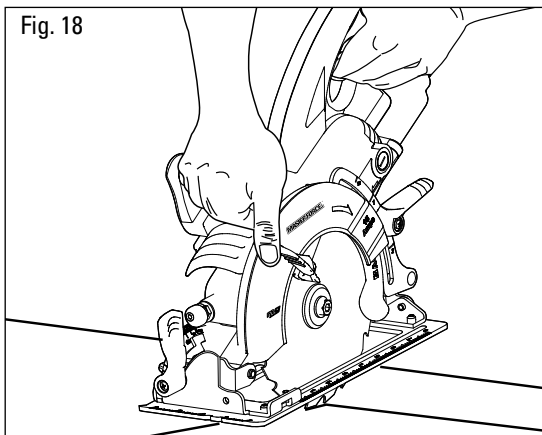


### MAKING POCKET CUTS

**⚠ WARNING:** Always adjust the bevel setting to zero before making a pocket cut. Attempting a pocket-cut at any other setting can result in a loss of control of the saw, which can result in serious injury.

1. Adjust the bevel setting to zero, set the blade to the correct blade depth setting, then use the lower blade guard lever to swing the guard up.

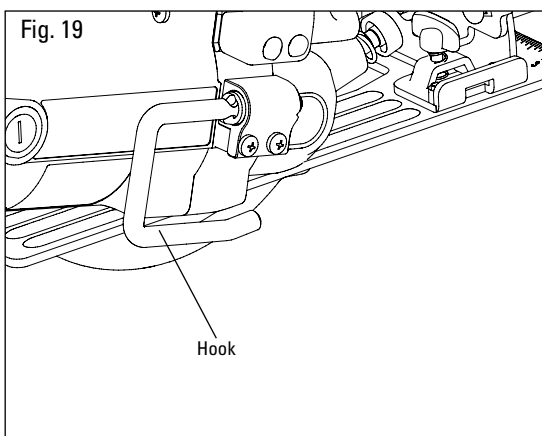
2. While holding the lower blade guard up by the lever, firmly rest the front of the saw base flat against the workpiece with the rear handle raised, so that the blade does not touch the workpiece (Fig. 18).



3. Depress the trigger switch to start the saw. Always allow the blade to reach full speed, and then slowly lower the blade onto the workpiece until the base is flat against the workpiece.

4. You **must** release the lower blade guard lever as the blade enters the material.

5. After you complete the cut, release the trigger switch and allow the blade to come to a complete stop. After the blade has stopped, remove it from the workpiece.



6. If the corners of your pocket cut are not completely cut through, use a hand finishing saw to finish the corners.

**⚠ WARNING:** Never tie the lower blade guard in the raised position. Leaving the blade exposed could result in serious injury.


## **HOOK (Fig. 19)**


**⚠ CAUTION:** Always unplug the saw before hanging the saw with the hook.

**⚠ CAUTION:** Never hook the saw in a high location or on a potentially unstable surface.


The hook is convenient for temporarily hanging the saw. To use the hook, simply lift up the hook until it snaps into the open position. When not in use, always lower the hook until it snaps into the closed position.

# MAINTENANCE


 **WARNING:** To ensure safety and reliability, all repairs should be performed by a qualified service technician.

 **WARNING:** For your safety, always turn off the switch and unplug the hypoid circular saw from the power source before performing any maintenance or cleaning.

It has been found that electric tools are subject to accelerated wear and possible premature failure when they are used to work on fiberglass boats and sports cars, wallboard, spackling compounds, or plaster. The chips and grindings from these materials are highly abrasive to electrical tool parts, such as bearings, brushes, commutators, etc. Consequently, it is not recommended that this tool be used for extended work on any fiberglass material, wallboard, spackling compound, or plaster. During use on these materials, it is extremely important that the tool is cleaned frequently by blowing with an air jet.

 **WARNING:** Always wear safety goggles or safety glasses with side shields during power-tool operations, or when blowing dust. If operation is dusty, also wear a dust mask.

## ROUTINE MAINTENANCE

 **WARNING:** Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc. come in contact with plastic parts. Chemicals can damage, weaken, or destroy plastic, which may result in serious personal injury.

Periodic maintenance allows for long life and trouble-free operation. A cleaning, lubrication and maintenance schedule should be maintained. As a common preventive maintenance practice, follow these recommended steps:

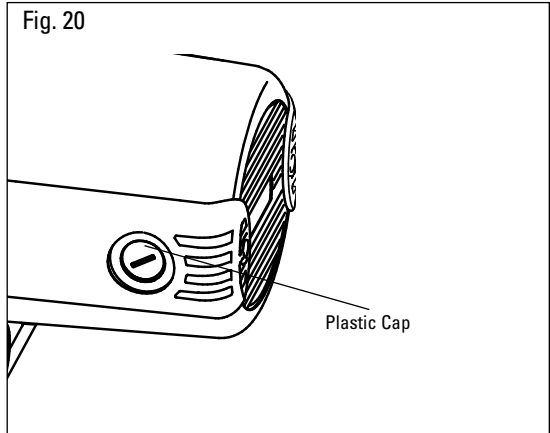
- When work has been completed, clean the tool to allow smooth functioning of the tool over time.
- Use clean, damp cloths to wipe the tool.
- Check the state of all electrical cables.
- Keep the motor's air openings free from oil, grease, and sawdust or woodchips, and store the tool in a dry place.
- Be certain that all moving parts are well lubricated, particularly after lengthy exposure to damp and/or dirty conditions.

## REPLACEMENT OF CARBON BRUSHES

**⚠ WARNING:** For your safety, always turn off the switch and unplug the saw from the power source before performing any maintenance or cleaning.

1. Unplug the saw before inspecting or replacing brushes.
2. Replace both carbon brushes when either has less than 1/4-in. length of carbon remaining, or if the spring or wire is damaged or burned.

3. Using a slotted screwdriver, remove the black, plastic cap on each side of the motor (Fig. 20), and carefully withdraw the spring-loaded brush assemblies. Keep brushes clean and sliding freely in their guide channels.



**NOTE:** To reinstall the same brushes, make sure that the brushes go back in the same way they came out. This will avoid the need for a “run-in” period.

4. Insert new brush assemblies into the guide channels with the carbon part going in first, being certain to fit the two metal “ears” into their slots in the channel (Fig. 20).
5. Remember to replace both end caps after inspecting or servicing brushes. Tighten the caps snugly, but do not over-tighten. Before use, the saw should be allowed to “RUN IN” (run at no load without a blade) for 5 minutes to seat the new brushes properly.

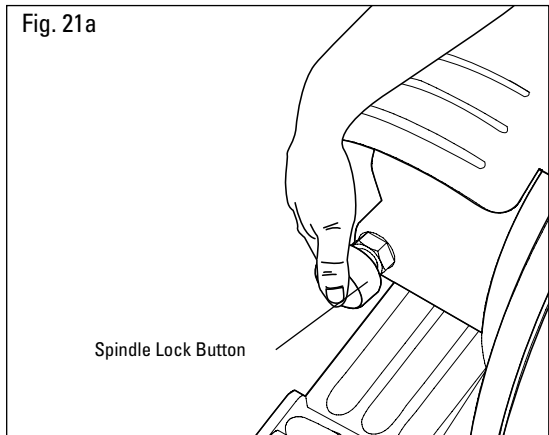
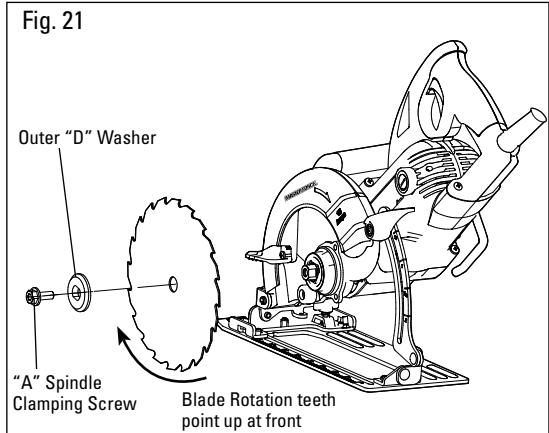
## CHANGING THE BLADE

**⚠ WARNING:** Be sure to wear protective work gloves while handling a saw blade. The blade can injure unprotected hands.

1. Unplug the saw from the power source.

**⚠ WARNING:** To prevent personal injury, ALWAYS disconnect the plug from power source BEFORE assembling parts, making adjustments or changing blades.

2. Place the saw, on its side, on a flat surface.
3. Loosen the depth-of-cut adjustment lever, raise the saw up all the way, and tighten the lever. This gives you easier access to the blade mounting area.
4. Place the saw upright on its base on a flat surface.
5. To loosen the spindle-clamping screw "A," Fig. 21, depress the spindle-lock button (Fig. 21a). Insert the blade wrench in the spindle clamping screw "A." Move the wrench in and out slightly until you feel the spindle lock button depress further, which locks the blade in position so the spindle clamping screw can be removed.



6. Keeping the spindle lock button firmly depressed, turn the wrench clockwise to remove the spindle-clamping screw.
7. Use the blade-guard lever to raise the lower blade guard and hold it in the raised position for the next steps.

8. Completely remove the spindle-clamping screw "A," the outer "D" washer, and the blade (see Fig. 21).
  9. The remaining washer is the inner bushing washer that fits around the spindle shaft; it does not need to be removed.
  10. Put a drop of oil onto the inner bushing washer and outer "D" washer where they will touch the blade.
  11. Place the new saw blade inside the lower blade guard, onto the spindle shaft, and against the inner bushing.
- NOTE:** The teeth of the blade should point upward at the front of the saw. The printed side will face outward when using the blade included with the saw.
12. Replace the "D" washer.
  13. Firmly hold down the spindle lock button as you replace the spindle screw and hand tighten it in a counterclockwise direction. Then use the blade wrench to securely tighten the spindle clamping screw.

## **LUBRICATION**

All of the bearings in this tool are lubricated with a sufficient amount of high-grade lubricant for the life of the tool under normal operating conditions. Therefore, no further lubrication is required.

## **TROUBLE SHOOTING**

### **If the blade does not follow a straight line:**

- Teeth are dull. This is caused by hitting a hard object such as a nail, and dulling the teeth on one side. The blade tends to cut to the side with the sharpest teeth.
- Base is out of line or bent.
- Blade is bent.
- Edge guide or straight edge is not being used.

### **If the blade binds or smokes from friction:**

- Blade is dull.
- Blade is on backwards.
- Blade is bent.
- Workpiece is not properly supported.
- Incorrect blade is being used.

## **WARRANTY**

If, during normal use, this MASTERFORCE™ power tool breaks or fails due to a defect in material or workmanship within three years from the date of original purchase, simply bring this tool and its sales receipt back to your nearest MENARDS® retail store for a free equivalent replacement within those three years.

The warranty:

- (1) excludes expendable parts including but not limited to blades, bits, light bulbs, and/or batteries;
- (2) shall be void if this tool is used for commercial or rental purposes; and
- (3) does not cover any losses, injuries to persons/properties, or costs. This warranty does give you specific legal rights and you may have other rights, which vary from state to state.

**\*SAVE YOUR RECEIPTS.** Your warranty is void without them. For help, please call to our customer center, toll free number: 1-866-917-4374.